

APPLICATION FORMS:

Appendix B - "Short Form Application for Single Phase Attachment of Parallel Generation Equipment 20 kV or Smaller to the Electric System"

Appendix C - "Standard Application for Attachment of Parallel Generation Equipment to the Electric System" [for single phase equipment larger than 20 kV or for three-phase equipment of any size]

Appendix B

"SHORT FORM" APPLICATION FOR SINGLE PHASE ATTACHMENT OF PARALLEL GENERATION EQUIPMENT 20 kV OR SMALLER TO THE ELECTRIC SYSTEM OF:

Interconnection Provider: _____

Interconnection Provider's Designated Contact Person: _____

Interconnection Provider's Address: _____

Interconnection Provider's Fax Number: (____) _____

Interconnection Provider's E-Mail Address: _____

An application is a Complete Application when it provides all applicable and correct information required below. (Additional information to evaluate a request for Interconnection may be required pursuant to the application process after the application is deemed complete.)

Processing Fee:

The Interconnection Provider may require a cost-based Processing Fee, approved by the State Commission, to be paid at the time of application.

Applicant Information:

Legal Name of the Interconnecting Applicant:

Name: _____ Phone: (____) _____

Address: _____ Municipality: _____

Applicant's Electric Service Customer Account Number: _____

Name and Address of the Applicant as it appears on the Applicant's electric bill from the Electric Company:

Name: _____ Phone: (____) _____

Address: _____ Municipality: _____

B. Consulting Engineer or Contractor:

Name: _____ Phone: (____) _____

Address: _____

Estimated In-Service Date: _____

Existing Electric Service:

Capacity: _____ Amperes Voltage: _____ Volts

Service Character: ()Single Phase ()Three Phase

Location of Protective Interface Equipment on Property:
(Include address if different from customer address)

Energy Producing Equipment/Inverter Information:

Manufacturer: _____

Model No. _____ Version No. _____

()Synchronous ()Induction ()Inverter ()Other _____

Rating: _____ kW Rating: _____ kVA

Interconnection Voltage: _____ Volts

DG System Type Tested (Total System): ()Yes ()No; attach product literature

Equipment Type Tested (i.e. Inverter, Protection System):

()Yes ()No; attach product literature

One Line Diagram attached: ()Yes

Installation Test Plan attached: ()Yes

Signature:

CUSTOMER SIGNATURE:

TITLE:

DATE:

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APPENDIX C: STANDARDIZED APPLICATION FOR ATTACHMENT OF PARALLEL GENERATION EQUIPMENT TO THE ELECTRIC SYSTEM OF

_____ (Interconnection Provider) _____

Preamble and Instructions

An owner of a small distributed generator resource who requests interconnection to a State-regulated distribution or transmission facility, must submit an application by hand delivery, mail, e-mail or fax to the Interconnection Provider, as applicable as follows:

Interconnection Provider:

Interconnection Provider's Designated Contact Person:

Interconnection Provider's Address:

Interconnection Provider's Fax Number:

Interconnection Provider's E-Mail Address:

An application is a Complete Application when it provides all applicable and correct information required below. (Additional information to evaluate a request for Interconnection may be required pursuant to the application process after the application is deemed complete.)

Processing Fee:

The Interconnection Provider may require a cost-based Processing Fee, approved by the State Commission, to be paid at the time of application. The fee may vary, depending on the size and characteristics of the small resource generator (e.g., a single phase generator vs. a three phase generator).

Section 1. Applicant Information

A. Legal Name of Interconnecting Applicant (or, if an Individual, Individual's Name)

Name:

Mailing Address:

City: State: Zip Code:

Facility Location (if different from above):

Telephone (Daytime): Area Code Number (Evening) Area Code
Number

Facsimile Number:

E-Mail Address:

B. Alternative Contact Information (if different from Applicant)

Contact Name:
Contact Title:
Address:

Phone Number:
Facsimile Number:
E-mail address:

C. Will the distributed generation equipment be used for any of the following:

Net Metering? Yes ___ No ___ To supply power to the Interconnection Customer? Yes ___ No ___

To supply power to others? Yes ___ No ___

D. For generators installed at locations with existing electric service to which the proposed generator will interconnect, provide:

(Local Electric Service Provider*)

(Existing Account Number*)

Contact Name:
Contact Title:
Address:

Phone Number:
Facsimile Number (if known):
E-mail address (if known):

E. Requested Point of Interconnection:

F. Interconnection Applicant's requested in-service date:

Section 2. Generator Qualifications

All data collected in Sections 2, 3, and 4 are applicable only to the generator facility, NOT the necessary interconnection facilities

Energy source: ___ Solar ___ Wind ___ Hydro ___ Hydro ___ Type (e.g. Run-of-River) ___ Diesel ___ Natural Gas ___ Fuel Oil Other (state type) _____

Type of Generator: ___ Synchronous ___ Induction ___ DC Generator or Solar with Inverter

Generator Nameplate Rating: _____ kW (Typical)
Generator Nameplate KVAR: _____

Applicant or Customer-Site Load: _____ kW (if none so state) (Typical); _____
(Reactive Load, if known)

Maximum Physical Export Capability Requested: _____ kW

List components of the Generating Facility that are currently certified by a U.S. Department of Energy-approved laboratory and/or listed by the Underwriters Laboratory:

Equipment Type	UL Listing or U.S. Lab Certification (Identify)
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- 1.
- 2.
- 3.
- 4.
- 5.

Section 3. Generator Technical Information

Generator (or solar collector) Manufacturer, Model Name & Number:

Version Number:

Nameplate Output Power Rating in kW: (Summer) _____ (Winter) _____

Nameplate Output Power Rating in kVA: (Summer) _____ (Winter) _____

Individual Generator Power Factor

Rated Power Factor Leading:

Rated Power Factor Lagging:

Total Number of Generators in Wind Farm to be interconnected pursuant to this application: _____

Elevation: _____ Single phase _____ Three phase

Inverter Manufacturer, Model Name & Number (if used):

List of Adjustable Set points the protective equipment or software:

Generator Characteristic Data (for rotating machines):

[Note: For Wind Generators, a completed General Electric Company Power Systems Load Flow (PSLF) data sheet must be supplied with the application.]

For Synchronous and Induction Generators:

Direct Axis Transient Reactance, $X'd$: _____ P.U.

Direct Axis Unsaturated Transient Reactance, $X'd_i$: _____ P.U.

Direct Axis Subtransient Reactance, $X''d$: _____ P.U.

Generator Saturation Constant (1.0): _____

Generation Saturation Constant (1.2): _____

Negative Sequence Reactance: _____ P.U.

Zero Sequence Reactance: _____ P.U.

KVA Base: _____

RPM Frequency: _____

Additional information for Induction Generators:

*Field Volts _____
*Field Amperes _____
*Motoring Power (kW) _____
*Neutral Grounding Resistor (If Applicable) _____
*I²t or K (Heating Time Constant) _____
*Rotor Resistance _____
*Stator Resistance *Stator Reactance _____
*Rotor Reactance *Magnetizing Reactance _____
*Short Circuit Reactance _____
*Exciting Current _____
*Temperature Rise _____
*Frame Size *Design Letter _____
*Reactive Power Required In Vars (No Load) _____
*Reactive Power Required In Vars (Full Load) _____
*Total Rotating Inertia, H: _____ Per Unit on kVA Base

[*Note: Please contact Interconnection Provider prior to submitting the Application, to determine if the specified information above is required.]

Excitation & Governor System Data for Synchronous Generators only

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies.

A copy of the manufacturer's block diagram may not be substituted.

Section 4. Interconnection Equipment Technical Data Information

Will a transformer be used between the generator and the point of interconnection? ____ Yes ____ No

Will the transformer be provided by Interconnection Applicant? ____ Yes ____ No

Transformer Data (if applicable. for Interconnection Applicant-Owned Transformer):

Is the transformer: ____ single phase ____ three phase?

Size: _____ kVA

Transformer Impedance: _____ % on _____ kVA Base

If Three Phase:

Transformer Primary: _____ Volts _____ Delta _____ Wye _____ Wye Grounded

Transformer Secondary: _____ Volts _____ Delta _____ Wye _____ Wye Grounded

Transformer Fuse Data (if applicable, for Interconnection Applicant-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum Melt & Total Clearing Time-Current Curves)

Manufacturer: _____ Type: _____ Size: _____ Speed: _____

Interconnecting Circuit Breaker (if applicable):

Manufacturer: _____ Type: _____ Load Rating: _____ Interrupting Rating: _____ Trip Speed: _____
(Amps) (Amps) (Cycles)

Interconnection Protective Relays (if applicable):

(Enclose copy of any proposed Time-Overcurrent Coordination Curves)

Manufacturer:	Type:	Style/Catalog No.:	Proposed Setting:
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Current Transformer Data (if applicable):

(Enclose copy of Manufacturer's Excitation & Ratio Correction Curves)

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Potential Transformer Data (if applicable):

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Section 5. General Technical Information

Enclose copy of site electrical One-Line Diagram showing the configuration of all generating facility equipment, current and potential circuits, and protection and control schemes.

Is One-Line Diagram Enclosed? _____ Yes

[Note: This one-line diagram must be signed and stamped by a licensed Professional Engineer if the generating facility is larger than 50 kW.]

Enclose copy of any site documentation that indicates the precise physical location of the proposed generating facility (e.g., USGS topographic map or other diagram or documentation).

Proposed Location of Protective Interface Equipment on Property:
(Include Address if Different from Application Address) _____

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is Any Available Documentation Enclosed? _____ Yes

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).

Are Schematic Drawings Enclosed? _____ Yes

Section 6. Applicant Signature

I hereby certify that, to the best of my knowledge, all the information provided in the Interconnection Application is true and correct.

Signature of Applicant:

Date: